

Pat Ragland
PO Box 2725
Elizabethtown, KY 42702-2725
Email: patragland@outlook.com

January 7, 2016

Via FOIAonline

National Freedom of Information Officer
U.S. Environmental Protection Agency
Washington, DC

RE: FREEDOM OF INFORMATION ACT REQUEST

Pursuant to the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, and implementing regulations of the U.S. Environmental Protection Agency ("EPA" or "Agency"), 40 C.F.R. Part 2, I request all records regarding the U.S. Environmental Protection Agency's handling of my December 16, 2015 complaint RE: REFUSAL BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S REGION 4 TO PURSUE MY AUGUST 22, 2015 COMPLAINT OF VIOLATIONS OF THE FEDERAL UNDERGROUND INJECTION CONTROL (UIC) PROGRAM REGULATIONS. I included my August 22, 2015 complaint to Region 4 Administrator Heather McTeer Toney in my December 16, 2015 complaint to Office of Compliance Acting Director Betsy Smidinger and both complaints are attached herein. Please include all enforcement actions, administrative orders, correspondences, emails, faxes, plans, planning determinations, jurisdictional determinations, applications, permits, permit denials, modifications, inspections, complaints, environmental releases, studies, violations, inquiries, groundwater protection provisions, investigations, etc.

I understand that there may be fees and costs associated with this request and I agree to pay any fees and costs up to \$500 (five hundred dollars) associated with making these records available to me. If the fees and costs will be in excess of \$500 (five hundred dollars), please advise me before such fees and costs are incurred.

Please email me any questions you may have at patragland@outlook.com.

Sincerely,


Pat Ragland

Pat Ragland
PO Box 2725
Elizabethtown, KY 42702-2725
Email: patragland@outlook.com

Betsy Smidinger, Acting Director, Office of Compliance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N. W. (2221A)
Washington, DC 20460

December 16, 2015

RE: REFUSAL BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S REGION 4 TO
PURSUE MY AUGUST 22, 2015 COMPLAINT OF VIOLATIONS OF THE FEDERAL
UNDERGROUND INJECTION CONTROL (UIC) PROGRAM REGULATIONS

Dear Acting Director Betsy Smidinger:

The U.S. Congress intended for the U.S. Environmental Protection Agency to protect our nation's groundwater resources from the injection of contaminants but U.S. Environmental Protection Agency's Region 4 refuses to pursue my August 22, 2015 complaint of violations of the Federal Underground Injection Control (UIC) Program regulations. I was born in the neighborhood of "Gaithers Karst Window" sinkhole and have enjoyed its clear cool water on hot summer days. As an adjacent landowner I observed in July and August 2015 grading work for construction of the Kentucky Heartland Agricultural Complex. This grading work was already modifying the drainage pattern thereby increasing the amount of stormwater runoff into "Gaithers Karst Window" sinkhole. On August 22, 2015, I complained about violations of the Federal Underground Injection Control (UIC) Program regulations to the U.S. Environmental Protection Agency Region 4's Regional Administrator, Heather McTeer Toney (Attachment 1). My August 22, 2015 complaint (Attachment 1) on page 3 stated, *"Therefore the responsible parties altering the drainage pattern into this sinkhole are required to obtain registration and permitting by the U.S. Environmental Protection Agency for a Class V Underground Injection*

Well." On October 21, 2015 without receiving any response from the U.S. Environmental Protection Agency, I filed FOIA # EPA-R4-2016-000590 (Attachment 2) for all records regarding the U.S. Environmental Protection Agency's handling of my August 22, 2015 complaint (Attachment 1). Then three months after my August 22, 2015 complaint, I finally learn by a final disposition of my FOIA # EPA-R4-2016-000590 that no action has been taken to correct the violations of the Federal Underground Injection Control (UIC) Program regulations I cited. This November 24, 2015 final disposition (Attachment 3) found only two internal U.S. Environmental Protection Agency's Region 4 emails and a draft letter as the inept reaction the U.S. Environmental Protection Agency made to my August 22, 2015 complaint (Attachment 1).

According to page 6 of the U.S. Environmental Protection Agency's Protecting The Nation's Ground Water: EPA's Strategy For The 1990s, *"The overall goal of EPA's Ground-Water Policy is to prevent adverse effects to human health and the environment, and to protect the environmental integrity of the nation's ground-water resources."* However, adopting a wonderful goal to prevent adverse effects is undermined where there is not the will to protect the environmental integrity of the nation's groundwater resources.

Kentucky does not have primacy for the Federal Underground Injection Control (UIC) Program. Therefore, protecting Kentucky's groundwater from adverse effects of Underground Injection Control wells is the responsibility of the U.S. Environmental Protection Agency. As stated on page 8 of Protecting The Nation's Ground Water: EPA's Strategy For The 1990s, *"However, where specific Federal responsibilities are provided for under the law, the requirements of the law must prevail."* This U.S. Environmental Protection Agency responsibility to protect Kentucky's groundwater from adverse effects of Underground Injection Control wells cannot be handed off to state or local agencies.

It is irrefutable that discharging contaminated stormwater into "*Gaithers Karst Window*" sinkhole adversely effects an underground source of drinking water. Donald S. Mull and others of the U.S. Geological Survey reported the groundwater connection between the karst window sinkhole known as "*Gaithers Karst Window*" and the public water supply at Dyers Spring (also known as "*Gaither Spring*") on pages 18 and 19 of Water-Resources Investigations Report 87-4174¹ in 1988 as follows:

Two karst windows are known in the study area and are shown as springs (sites 15 and 22) on plate 1. In each case a spring or stream emerges at the upper end of the sinkhole, flows about. 250 feet and drains into a swallet at the lower end of the sinkhole. The two karst windows receive relatively little runoff because of the small area that drains directly into the sinkhole. However, the karst windows are hydrologically significant because the streams in each sinkhole provide a direct path to the subsurface for any contaminant deposited in or near the sinkhole. This fact has special significance in the case of the karst window at site 15 because flow from this site has been traced to Dyers Spring, part of the Elizabethtown public water supply.



Excerpt from Plate 1 of Donald S. Mull and others (1988)¹, U.S. Geological Survey, Water-Resources Investigations Report 87-4174, showing the dye trace flow path from Site 14 to "Gaithers Karst Window" as Site 15 and then to Dyers Spring (also known as "Gaither Spring") as Site 16 at Gaithers.

¹ Mull, Donald S., James L. Smoot, and Timothy D. Liebermann. Dye tracing techniques used to determine groundwater flow in a carbonate aquifer system near Elizabethtown, Kentucky, U.S. Geological Survey, Water-Resources Investigations Report 87-4174, 1988.

This karst window sinkhole Donald S. Mull and others (1988) referred to as "site 15" was referred to by Charles J. Taylor of the U.S. Geological Survey as "*Gaithers Karst Window*" on page 14 of Water-Resources Investigations Report 96-4254 ² in 1997 as follows:

The results of these tracing tests indicated that dye-laden ground-water from the injection site was conducted about 0.5 mi to the unroofed ground-water conduit exposed in the Gaithers karst window (Mull and others, 1988b). From there, dye-laden water flowed to Dyers Spring, about 0.75 mi to the west.

My August 22, 2015 complaint (Attachment 1) provided U.S. Environmental Protection Agency's Region 4 everything needed for a complaint of violations of the Federal Underground Injection Control (UIC) Program regulations. The Google Earth imagery for coordinates 37° 39' 23.35" N, 85° 53' 26.28" W on page 2 of my August 22, 2015 complaint (Attachment 1) showed "*Gaithers Karst Window*" sinkhole as a cluster of trees between the exit ramp of Western Kentucky Parkway and Ring Road South. On page 4 of my August 22, 2015 complaint (Attachment 1) the Kentucky Heartland Agricultural Complex Record Plat 5714 ³ established that the "Future Development Tract A" and the "Lot 1" of this complex were designed to share a designated "Variable Permanent Drainage Easement For Detention". This plat 5714 on page 4 of my August 22, 2015 complaint (Attachment 1) established the location of this designated "Variable Permanent Drainage Easement For Detention" to be at the same location of "*Gaithers Karst Window*" sinkhole between the exit ramp of Western Kentucky Parkway and Ring Road South. Therefore, manmade modifications were designed to discharge additional stormwaters of the Kentucky Heartland Agricultural Complex into "*Gaithers Karst Window*" sinkhole thereby making this sinkhole an "improved sinkhole" subject to the Federal Underground Injection

² Taylor, Charles J. "Delineation of ground-water basins and recharge areas for municipal water-supply springs in a karst aquifer system in the Elizabethtown area, Northern Kentucky." USGS Water-Resources Investigations Report 96-4254 (1997): 22, <http://pubs.usgs.gov/wri/1996/4254/report.pdf> [accessed 2/10/2015]. I cited this on page 6 of my August 22, 2015 complaint.

³ Plat 5714 of the Kentucky Heartland Agricultural Complex property was filed in the Hardin County Clerk's office on January 16, 2015 and is available through <http://www.hccok.org/eSearch>.

Control (UIC) Program regulations. I stated on page 3 of my August 22, 2015 complaint (Attachment 1), "*Therefore the responsible parties altering the drainage pattern into this sinkhole are required to obtain registration and permitting by the U.S. Environmental Protection Agency for a Class V Underground Injection Well.*" My August 22, 2015 complaint (Attachment 1) on page 5 also provided Deed Book 1405 Page 990 and Deed Book 1393 Page 795 with the addresses of the two owners of the properties in the Kentucky Heartland Agricultural Complex. The Deed Book 1405 Page 990 shows the Farm Credit Mid-America, FLCA (Federal Land Credit Association) as the owner of "Lot 1 Kentucky Heartland Agricultural Complex" from the Grantor Hardin County Cooperative Extension Service District. Then by Deed Book 1393 Page 795 the remainder of the Kentucky Heartland Agricultural Complex is still owned by the Hardin County Cooperative Extension Service District that is shown as the "Future Development Tract A" on plat 5714 in my August 22, 2015 complaint (Attachment 1). Therefore, the modifications of the Farm Credit Mid-America, FLCA (Federal Land Credit Association) property and the modifications of the Hardin County Cooperative Extension Service District property were both designed to discharge their contaminated stormwaters into "*Gaithers Karst Window*" sinkhole.

Trees remain growing inside "*Gaithers Karst Window*" sinkhole because the deep collapsed sinkhole has never been suitable for crop cultivation. Note that this cluster of trees at coordinates 37° 39' 23.35" N, 85° 53' 26.28" W on the Google Earth image on page 2 of my August 22, 2015 complaint (Attachment 1) between the exit ramp of Western Kentucky Parkway and Ring Road South is the same cluster of trees on the "Boring Location Plan" on page 4 of my August 22, 2015 complaint (Attachment 1).

However, despite all the known facts the U.S. Environmental Protection Agency's Region 4 refuses to pursue my August 22, 2015 complaint (Attachment 1) of violations of the Federal

Underground Injection Control (UIC) Program regulations as stated in U.S. Environmental Protection Agency Region 4's draft letter (Attachment 3):

At this time, the EPA has not received inventory information for any proposed injection into Gaithers Karst Window, the sinkhole that you reference in your letter. Recent Google Earth images of the completed highway do not appear to show any stormwater being directed to Gaithers Karst Window which is connected hydrogeologically to Gaither Spring. If the Hardin County Cooperative Extension Service has plans to direct stormwater to Gaithers Karst Window from their proposed facility, then inventory information must be submitted to the EPA.

According to this logic in the U.S. Environmental Protection Agency Region 4's draft letter (Attachment 3), as long as a stormwater discharge violator refuses to inform the U.S. Environmental Protection Agency of the intent to discharge stormwater into an "improved sinkhole" the violator will not be required to comply with the Federal Underground Injection Control (UIC) Program regulations. I trust this is not the actual policy of the U.S. Environmental Protection Agency for dealing with complaints of violations of the Federal Underground Injection Control (UIC) Program regulations.

Relying on dated Google Earth imagery is not a timely remote inspection of the situation in my August 22, 2015 complaint (Attachment 1). The most recent Google Earth imagery for the area of "Gaithers Karst Window" sinkhole at coordinates 37° 39' 23.35" N, 85° 53' 26.28" W is dated September 24, 2014. However, the U.S. Environmental Protection Agency Region 4's draft letter (Attachment 3) relies on this dated Google Earth imagery as it states, "*Recent Google Earth images of the completed highway do not appear to show any stormwater being directed to Gaithers Karst Window*". The September 24, 2014 dated Google Earth imagery naturally does not include the manmade grading modifications that were present in July 2015 to direct additional stormwaters of the Kentucky Heartland Agricultural Complex to the "Gaithers Karst Window" sinkhole as shown in the following July 28, 2015 photo.



This photo is looking north from the intersection of Western Kentucky Parkway and Ring Road South. This photo shows grading has been performed for the Kentucky Heartland Agricultural Complex. The trees on the right foreground are growing inside "Gaithers Karst Window" sinkhole. This photo shows there is a drain culvert in the bare soil just to the left of these "Gaithers Karst Window" trees to direct stormwater of the Kentucky Heartland Agricultural Complex to "Gaithers Karst Window" sinkhole. This photo was taken July 28, 2015 by Richard McGehee.

The U.S. Environment Protection Agency Region 4's draft letter (Attachment 3) acknowledges the owners or operators of the Kentucky Heartland Agricultural Complex failed to submit inventory information as, *"At this time, the EPA has not received inventory information for any proposed injection into Gaithers Karst Window"*. Therefore the Kentucky Heartland Agricultural Complex owners or operators are in violation of the Federal Underground Injection Control (UIC) Program regulations as stated in the excerpts of 40 CFR § 144.82 as follows:

REQUIREMENTS FOR ALL CLASS V INJECTION WELLS

§ 144.82 What must I do to protect underground sources of drinking water?

If you own or operate any type of Class V well, the regulations below require that you **cannot allow movement of fluid into USDWs that might cause endangerment**, you must comply with other Federal UIC requirements in 40 CFR parts 144 through 147, and you must comply with any other measures required by your State or EPA Regional Office UIC Program **to protect USDWs**, and you must properly close your well when you are through using it. You also **must submit basic information about your well**, as described in § 144.83.

(a) *Prohibition of fluid movement.* (1) As described in § 144.12(a), your injection activity **cannot allow the movement of fluid containing any contaminant into USDWs, if the presence of that contaminant may cause a violation of the primary drinking water standards under 40 CFR part 141, other health based standards, or may otherwise adversely affect the health of persons.** This prohibition applies to your well construction, operation, maintenance, conversion, plugging, closure, or any other injection activity.

(2) If the Director of the UIC Program in your State or EPA Region learns that your injection activity may endanger USDWs, he or she **may require you to close your well, require you to get a permit, or require other actions** listed in § 144.12(c), (d), or (e). [Bold and underline by Ragland for emphasis.]

The Federal Underground Injection Control (UIC) Program regulations prohibiting discharges of contaminated stormwater into an "improved sinkhole" as a Class V Underground Injection Control well are provided in 40 CFR § 144.3 and § 144.11 as follows:

§ 144.3 Definitions.

Improved sinkhole means a naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings which have been modified by man for the purpose of directing and emplacing fluids into the subsurface.

§ 144.11 Prohibition of unauthorized injection.

Any underground injection, except into a well authorized by rule or except as authorized by permit issued under the UIC program, is prohibited. The construction of any well required to have a permit is prohibited until the permit has been issued.

Application of the Federal Underground Injection Control (UIC) Program 40 CFR § 144.3 and § 144.11 regulations to the Kentucky Heartland Agricultural Complex owners or operators can be presented in the following logical argument:

Major premise: The Federal Underground Injection Control (UIC) Program regulations specify that manmade modification of a sinkhole to accept additional stormwater runoff is only permitted with U.S. Environmental Protection Agency approval for the sinkhole to be an "improved sinkhole" Class V injection well.

Minor premise: Plat 5714⁴ establishes that manmade modification of the Kentucky Heartland Agricultural Complex property modifies the "Gaithers Karst Window" sinkhole to accept additional stormwater runoff.

⁴ Plat 5714 of the Kentucky Heartland Agricultural Complex property was filed in the Hardin County Clerk's office on January 16, 2015 and is available through <http://www.hccokyo.org/eSearch>.

Conclusion: Therefore the Kentucky Heartland Agricultural Complex owners or operators can only modify the " *Gaithers Karst Window*" sinkhole to accept additional stormwater runoff if the U.S. Environmental Protection Agency approves "*Gaithers Karst Window*" as an "improved sinkhole" Class V injection well.

The U.S. Environmental Protection Agency's Region 4 does not refute this logic but nevertheless refuses to deal with the owners or operators of the Kentucky Heartland Agricultural Complex as violators of the Federal Underground Injection Control (UIC) Program regulations. The U.S. Environmental Protection Agency Region 4's refusal to pursue my August 22, 2015 complaint (Attachment 1) of violations of the Federal Underground Injection Control (UIC) Program regulations requires me as an adjacent landowner to seek regulatory compliance from you, Betsy Smidinger, Acting Director, Office of Compliance of the U.S. Environmental Protection Agency's Washington, DC headquarters.

The U.S. Environment Protection Agency Region 4's draft letter (Attachment 3) acknowledges the owners or operators of the Kentucky Heartland Agricultural Complex failed to submit inventory information as, "*At this time, the EPA has not received inventory information for any proposed injection into Gaithers Karst Window*". Therefore the option to cover the injection of contaminated stormwater into the "*Gaithers Karst Window*" sinkhole as "authorized by rule" is prohibited according to 40 CFR § 144.24 and 40 CFR § 144.84 as follows:

§ 144.24 Class V wells.

(a) A Class V injection well is authorized by rule, **subject to the conditions in § 144.84**

(c) *Prohibition of injection.* An owner or operator of a well which is authorized by rule pursuant to this section is **prohibited from injecting into the well:**

(3) **Upon failure to submit inventory information** in a timely manner pursuant to § 144.26;

§ 144.84 Do I need to get a permit?

(b) *Circumstances in which permits or other actions are required.* If you fit into one of the categories listed below, your Class V well is **no longer authorized by rule**. This means that **you have to either get a permit or close your injection well**. You can find out by contacting the UIC Program Director in

your State or EPA Region if this is the case. Subpart D of this part tells you how to apply for a permit and describes other aspects of the permitting process. Subpart E of this part outlines some of the requirements that apply to you if you get a permit.

(4) You have **failed to submit inventory information** to your UIC Program Director, as described in § 144.83(a) (in which case, **you are prohibited from injecting into your well** until you comply with the inventory requirements); [Bold and underline by Ragland for emphasis.]

42 U.S. Code § 300h–2(a)(2) requires the U.S. Environmental Protection Agency to issue an order for violators of Federal Underground Injection Control Program regulations to comply with the regulations or commence a civil action as follows:

42 U.S. Code § 300h–2(a)(2). Whenever the Administrator finds during a period during which a State does not have primary enforcement responsibility for underground water sources that any person subject to any requirement of any applicable underground injection control program in such State is violating such requirement, the Administrator shall issue an order under subsection (c) of this section requiring the person to comply with such requirement or the Administrator shall commence a civil action under subsection (b) of this section.

Furthermore, the Federal Underground Injection Control (UIC) Program regulations prohibit "*Gaithers Karst Window*" sinkhole to be an "improved sinkhole" Class V injection well. The groundwater of "*Gaithers Karst Window*" sinkhole is withdrawn at Dyers Spring (also known as "*Gaither Spring*") with Water Withdrawal Permit #0123 at coordinates 37° 39' 27.2" N, 85° 54' 3.7" W. The U.S. Environment Protection Agency Region 4's draft letter (Attachment 3) does acknowledge "... *Gaithers Karst Window which is connected hydrogeologically to Gaither Spring*" and "*the Water District uses water from Gaither Spring as one source of public drinking water*". Since groundwater of "*Gaithers Karst Window*" sinkhole is an underground source of public drinking water, the discharges of contaminated stormwater into "*Gaithers Karst Window*" sinkhole as an "improved sinkhole" are in violation of 40 CFR § 144.12.

40 CFR § 144.12 Prohibition of movement of fluid into underground sources of drinking water.

(a) **No owner or operator** shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that **allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons.** The **applicant for a permit shall have the burden of showing that the requirements of this paragraph are met.**

(b) For Class I, II, III, and VI wells ...

(c) For Class V wells, if at any time the Director learns that a Class V well may cause a violation of primary drinking water regulations under 40 CFR part 142, he or she shall:

(1) Require the injector to obtain an individual permit;

(2) Order the injector to take such actions (including, where required, **closure of the injection well**) as may be necessary to prevent the violation. For EPA administered programs, such orders shall be issued in accordance with the appropriate provisions of the SDWA; or

(3) Take enforcement action.

(d) Whenever the Director learns that a Class V well may be otherwise adversely affecting the health of persons, he or she may prescribe such actions as may be necessary to prevent the adverse effect, including any action authorized under paragraph (c) of this section.

(e) Notwithstanding any other provision of this section, the Director **may take emergency action** upon receipt of information that a contaminant which is present in or **likely to enter a public water system or underground source of drinking water may present an imminent and substantial endangerment to the health of persons.** If the Director is an EPA official, he must first determine that the appropriate State and local authorities have not taken appropriate action to protect the health of such persons, before taking emergency action. [Bold and underline by Ragland for emphasis.]

Application of the Federal Underground Injection Control (UIC) Program 40 CFR § 144.12 regulation to prevent the owners or operators of the Kentucky Heartland Agricultural Complex from discharging contaminated stormwater into "Gaithers Karst Window" sinkhole can be presented in the following logical argument:

Major premise: By 40 CFR § 144.12 the U.S. Environmental Protection Agency prohibits discharges by injection wells to contaminate underground sources of drinking water.

Minor premise: Discharges of contaminated stormwater runoff from the Kentucky Heartland Agricultural Complex into "Gaithers Karst Window" sinkhole contaminate an underground source of drinking water.

Conclusion: The U.S. Environmental Protection Agency prohibits "Gaithers Karst Window" sinkhole to be an "improved sinkhole" Class V injection well.

Even injecting clean water into a Class V well before showing the proposed injection will not endanger an underground source of drinking water is a serious violation of the Safe Drinking Water Act. The Opinion of the United States Court of Appeals, Ninth Circuit in *US v. King*, No. 09-30442 (9th Cir. Oct. 3, 2011) provides pertinent legal analysis as stated in the following selected excerpts:

In February 2008, the government filed a First Superseding Indictment charging King with four counts of violating the Safe Drinking Water Act ("SDWA"). Each count alleged that King "willfully injected water" into a well "which is more than eighteen feet in vertical depth below land surface, without a permit issued by the State of Idaho, despite having knowledge of the requirement to first obtain such a permit[.]" None of the four counts charged that the injected water was contaminated.

The SDWA's implementing regulations specify that "[t]he applicant for a permit shall have the burden of showing" that the applicant's "injection activity" will not "allow[] the movement of fluid containing any contaminant into underground sources of drinking water." 40 C.F.R. § 144.12(a). "Any underground injection, except . . . as authorized by permit issued under the UIC program, is prohibited." *Id.* at § 144.11. "[N]o injection shall be authorized by permit . . . if it results in the movement of fluid containing any contaminant into [an USDW] if the presence of that contaminant may cause a violation of any primary drinking water violation. . . ." *Id.* at § 144.1(g)

The SDWA and its implementing regulations are not concerned with whether an injected fluid is itself contaminated. Rather, they are concerned with the result of "injection activity." A permit applicant must show that the proposed activity will not allow "the movement of fluid containing [a] contaminant." *Id.* Injections of clean water into the ground can cause the movement of contaminants into an aquifer.

The injection provisions of the SDWA are "preventive." 1974 U.S.C.C.A.N. at 6463. Congress concluded that the most effective way to ensure clean drinking water was to prevent pollution of underground aquifers in the first place, rather than to clean up polluted aquifers after the fact. Under the SDWA, the danger posed by proposed injections to an underground aquifer is determined during the permitting process. As noted above, the SDWA puts the burden on a permit applicant to show that a proposed injection will not endanger an USDW. If an applicant fails to show that a proposed injection is safe, the SDWA requires that the permit be denied. That is, in the absence of a showing by the applicant that a proposed injection is safe, the SDWA presumes that the injection will endanger an USDW.

Underground fluid injection can have disastrous consequences for drinking water and, in turn, for human health. Injected fluid is hard to trace once it enters the ground, and polluted aquifers are hard to remediate. Congress' cautious "preventive" approach requires permit applicants to show that their injections will not harm underground sources of drinking water. It presumes, until an applicant shows otherwise, that injections will contaminate an USDW. Although this approach may result in forbidding some injections that would not contaminate an USDW, it is a valid exercise of Congress' authority.

The U.S. Environmental Protection Agency Region 4's refusal to require the Kentucky Heartland Agricultural Complex owners or operators to comply with the Federal Underground Injection Control (UIC) Program regulations is furthering the illegal stormwater discharges of the Kentucky Heartland Agricultural Complex to continue unfettered to this day.

Adopting a wonderful goal to prevent adverse effects without the will to carry out the practical concrete steps to achieve the goal is not enough. Pope Francis addressed the lack of will to achieve environmental goals at the United Nations General Assembly on September 25, 2015 as the following excerpts state:

Solemn commitments, however, are not enough, even though they are a necessary step toward solutions. The classic definition of justice which I mentioned earlier contains as one of its essential elements a constant and perpetual will: Iustitia est constans et perpetua voluntas ius sum cuique tribuendi. [Justice is the constant and perpetual wish of giving to each one his right.] Our world demands of all government leaders a will which is effective, practical and constant, concrete steps and immediate measures for preserving and improving the natural environment.

We Christians, together with the other monotheistic religions, believe that the universe is the fruit of a loving decision by the Creator, who permits man respectfully to use creation for the good of his fellow men and for the glory of the Creator; he is not authorized to abuse it, much less to destroy it.

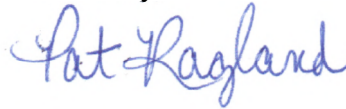
The U.S. Environmental Protection Agency's Final Guidance On Emergency Authority under Section 1431 of the Safe Drinking Water Act in footnote 2 states the U.S. Congress intends for the U.S. Environmental Protection Agency to take preventive actions to prevent a potential hazard from materializing as follows:

The preventative intent of Section 1431 is apparent in the legislative history, which states:

*the Committee intends that this language be construed by the courts and the Administrator so as to give protection of the public health. Administrative and judicial **implementation of this authority must occur early enough to prevent the potential hazard from materializing.** [Bold and underlining by Ragland for emphasis.]*

I trust the present administration has the will to prevent abuse of the natural environment. Since the U.S. Environmental Protection Agency Region 4 has refused to pursue my August 22, 2015 complaint (Attachment 1) I ask that you, Betsy Smidinger, Acting Director, Office of Compliance to obtain regulatory compliance of these violations of the Federal Underground Injection Control (UIC) Program regulations. As an adjacent landowner I would appreciate you keeping me informed of progress the U.S. Environmental Protection Agency makes to prevent the illegal discharges of contaminated stormwater at "Gaithers Karst Window" sinkhole.

Sincerely,



Pat Ragland

Email: patragland@outlook.com

Pat Ragland
PO Box 2725
Elizabethtown, KY 42702-2725
Email: patragland@outlook.com

Heather McTeer Toney, Regional Administrator
U. S. Environmental Protection Agency - Region 4
61 Forsyth Street SW
Atlanta, GA 30303-8960

August 22, 2015

RE: COMPLAINT THAT THE PROPOSED ALTERATIONS TO "GAITHERS KARST WINDOW" WILL VIOLATE THE FEDERAL UNDERGROUND INJECTION CONTROL REGULATIONS.

Dear Administrator Heather McTeer Toney:

Proposed developments have designed additional stormwater runoff to be conveyed into the large sinkhole collapse known as "*Gaithers Karst Window*" in violations of the federal Underground Injection Control regulations. The Kentucky Heartland Agricultural Complex development plat¹ shows "VARIABLE PERMANENT DRAINAGE EASEMENT FOR DETENTION" at the location of the large "*Gaithers Karst Window*" collapse. These new sources of contaminated stormwater will adversely impact the local public underground source of drinking water.

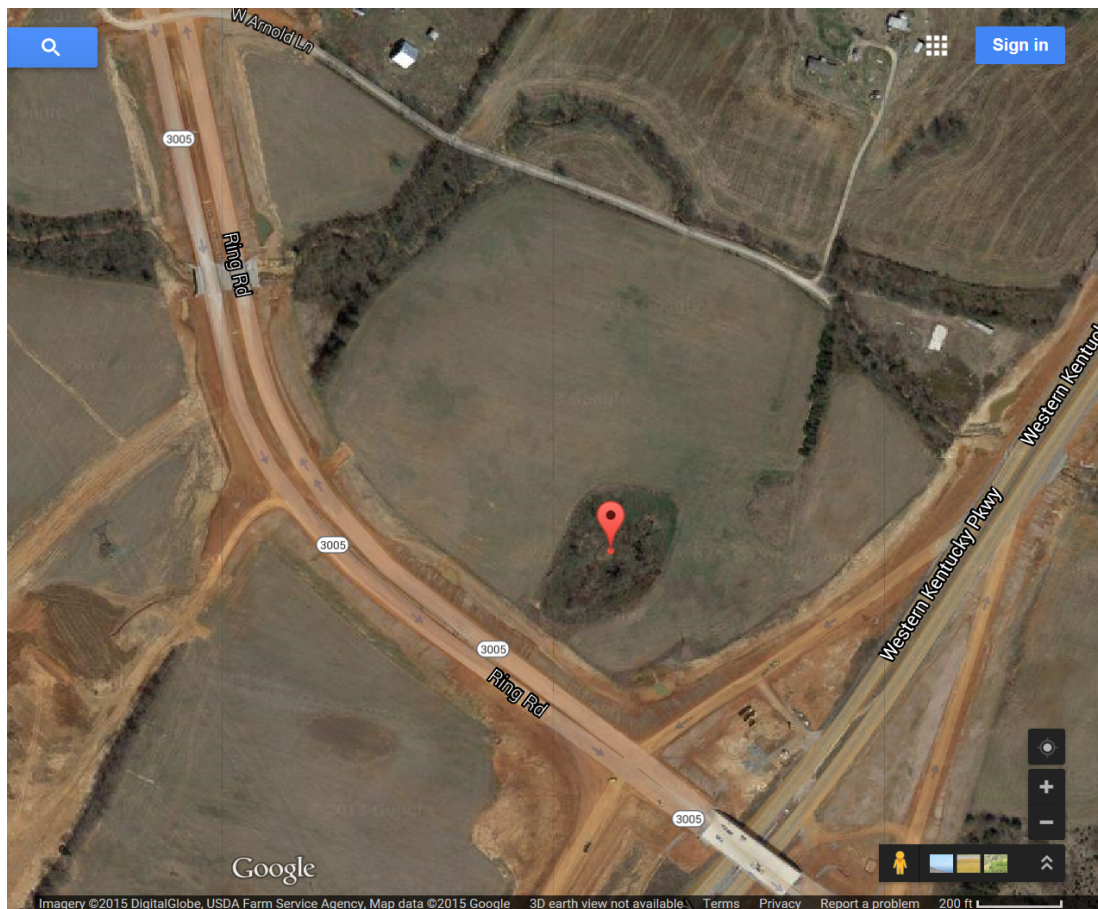
This large sinkhole collapse has been identified as "*Gaithers Karst Window*" collapse by Charles Taylor in the U.S. Geological Survey Water-Resources Investigations Report 96-4254² on page 6 as follows:

¹ Plat 5714 of the Kentucky Heartland Agricultural Complex property is from the Hardin County Clerk's office.
<http://www.hccoky.org/eSearch>

² Taylor, Charles J. "Delineation of ground-water basins and recharge areas for municipal water-supply springs in a karst aquifer system in the Elizabethtown area, Northern Kentucky." USGS Water-Resources Investigations Report (1997): 22, <http://pubs.usgs.gov/wri/1996/4254/report.pdf> [accessed 2/10/2015]

Where solution occurs above an active groundwater conduit and part of the conduit is unroofed by development of a cover-collapse sinkhole, the subsurface stream may be exposed to view. This type of solutional feature is a karst window. Two karst windows are present in the study area (fig. 3): (1) the Gaithers karst window, about 1 mi east of Dyers Spring, ...

This large "Gaithers Karst Window" collapse is plainly visible on GIS imagery such as [Google Maps](#) by simply typing in its coordinates, 37°39'23.35"N, 85°53'26.28"W and switching to "Satellite view" as shown below.



Google Map shows the large collapse of "Gaithers Karst Window" as the wooded area around Google's red location symbol.

By the following federal regulations the proposed manmade alterations of this sinkhole to accept additional stormwater will make the "Gaithers Karst Window" collapse an "*improved sinkhole*" Class V Underground Injection Control Well.

40 CFR § 144.3 Definitions.

Improved sinkhole means a naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings which have been modified by man for the purpose of directing and emplacing fluids into the subsurface.

Well means: A bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or, a dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole; or, a subsurface fluid distribution system.

40 CFR § 146.5 Classification of injection wells.

(e) Class V. Injection wells not included in Class I, II, III, or IV. Specific types of Class V injection wells are also described in 40 CFR 144.81. Class V wells include:

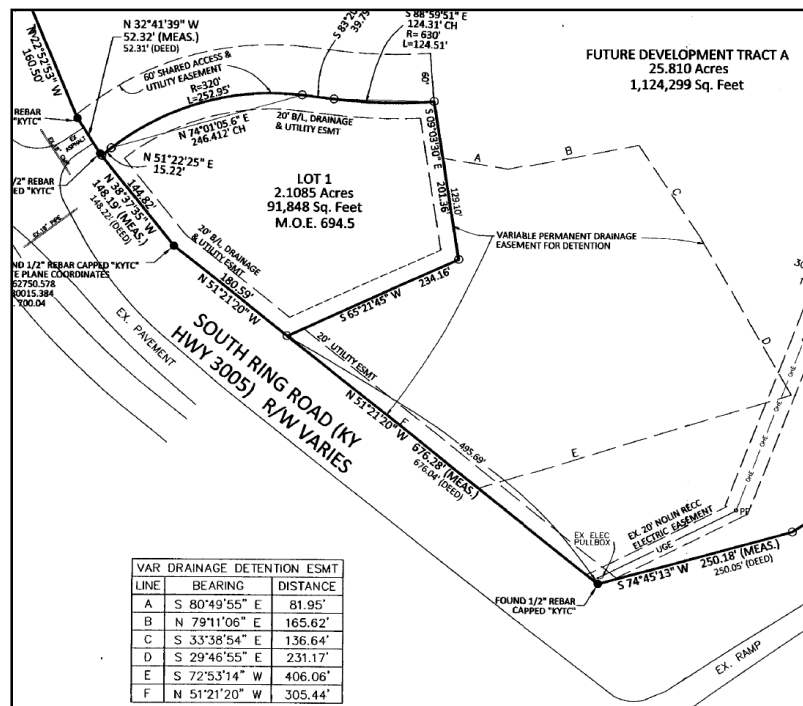
- (4) Drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation;

Therefore the responsible parties altering the drainage pattern into this sinkhole are required to obtain registration and permitting by the U.S. Environmental Protection Agency for a Class V Underground Injection Well.

The proposed developments will increase the amount of impervious surface area consequently creating an increase in stormwater runoff. The proximity to the "Gaithers Karst Window" collapse of the proposed Hardin County Cooperative Extension Service Office development site and of the proposed Farm Credit Mid-America development site are shown on the following two images below. This "*improved sinkhole*" will provide little or no removal of contaminants from stormwater prior to reaching the public underground source of drinking water. As you would be well aware stormwater runoff from roads and parking lots are known to contain hydrocarbon lubricants, antifreeze, hydraulic fluids, asphalt surface leachate, deicing salts, cyanide, heavy metals, nitrates, etc.





The Hardin County Cooperative Extension Service acquisition of property for their Kentucky Heartland Agricultural Complex is shown by the excerpt of the first deed below.



An excerpt from Plat 5714³ shows the "VARIABLE PERMANENT DRAINAGE EASEMENT FOR DETENTION" of the Kentucky Heartland Agricultural Complex will be at the location of the "Gaithers Karst Window" collapse between the Western Kentucky Parkway exit ramp and Ring Road. The Lot 1 of the Kentucky Heartland Agricultural Complex has been purchased by Farm Credit Mid-America as shown by the excerpt of the second deed below.

³ Plat 5714 of the Kentucky Heartland Agricultural Complex property is from the Hardin County Clerk's office.
<http://www.hccoky.org/eSearch>

	
Doc ID: 009393460005 Type: DEE	
Kind: DEED	
Recorded: 04/10/2014 at 10:58:16 AM	
Receipt#: 2014-00004164	
Page 1 of 5	
Fees: \$23.00 Tax: \$1,600.00	
Hardin County Clerk	
Kenneth L. Tabb Clerk	
BK 1393 PG 795-799	
GRANTOR: Joseph Gray Janes Living Trust and Jean Lawson Janes Living Trust	
GRANTEE: Hardin County Cooperative Extension Service District	
PVA # 204-00-00-009	
ACV: \$1,600,000.00	
PROPERTY ADDRESS: Arnold Lane, Elizabethtown, Kentucky 42701	
LEGAL DESCRIPTION: Metes and Bounds:	
D E E D	
THIS DEED made and entered into this the 10th day of April, 2014, by and between	
Joseph Gray Janes Living Trust and Jean Lawson Janes Living Trust, whose address is	
<u>206 Tree Valley Road, Elizabethtown Ky 42701</u> , Parties of the First Part, and	
Hardin County Cooperative Extension Service District, whose address is 201 Peterson Drive,	
Elizabethtown, Kentucky 42701, (which address shall be the in-care-of address to which the	
property tax bill for the current year may be sent) Party of the Second Part;	

	
Doc ID: 009666100004 Type: DEE	
Kind: DEED	
Recorded: 02/10/2015 at 10:48:58 AM	
Receipt#: 2015-00001391	
Page 1 of 4	
Fees: \$20.00 Tax: \$325.00	
Hardin County Clerk	
Debbie Donnelly Clerk	
BK 1405 PG 990-993	
GRANTOR: Hardin County Cooperative Extension Service District	
GRANTEE: Farm Credit Mid-America, FLCA, a corporation duly existing and operating	
under an Act of Congress known as the Farm Credit Act of 1971, as amended.	
PVA # 204-00-00-009	
ACV: \$325,000.00	
PROPERTY ADDRESS: Lot 1, of 501 South Ring Road, Elizabethtown, KY 42701	
LEGAL DESCRIPTION: Lot 1 Kentucky Heartland Agricultural Complex.	
D E E D	
THIS DEED made and entered into this the <u>10th</u> day of <u>February</u> , 2015 by and	
between Hardin County Cooperative Extension Service District, whose address is 201	
Peterson Drive, Elizabethtown, KY 42701 Party of the First Part, and Farm Credit Mid-	
America, FLCA, a corporation duly existing and operating under an Act of Congress known	
as the Farm Credit Act of 1971, as amended., whose address is 1601 UPS Drive, Louisville,	
KY 40223, (which address shall be the in-care-of address to which the property tax bill for the	
current year may be sent), Party of the Second Part;	

Both of these deeds are available online from the Hardin County Clerk's office at:

<http://www.hccoky.org/eSearch>

Charles Taylor's 1996 U.S. Geological Survey Water-Resources Investigations Report 96-4254⁴ reported that the groundwater exposed in "Gaithers Karst Window" flows to the public water supply Dyers Spring (Gaithers Station Spring) on page one as follows:

Two springs in southeast Hardin County, Kentucky, Elizabethtown Spring (also known locally as City Spring) and Dyers Spring (Gaithers Station Spring), are used as the primary sources of municipal water for the City of Elizabethtown (fig. 1). About 1.4 Mgal/d is withdrawn from Elizabethtown Spring and about 567 Kgal/d is withdrawn from Dyers Spring during periods of highest consumptive use (Robert Best, Manager, Elizabethtown Water Plant, oral commun., 1995).

and on page fourteen as follows:

The results of these tracing tests indicated that dye-laden ground-water from the injection site was conducted about 0.5 mi to the unroofed ground-water conduit exposed in the Gaithers karst window (Mull and others, 1988b). From there, dye-laden water flowed to Dyers Spring, about 0.75 mi to the west.

Therefore contaminated stormwater discharges and spills into this "improved sinkhole" Class V Underground Injection Control Well will quickly adversely impact the public water intake at the Dyers Spring (Gaither Station Spring). This public water intake is authorized by Water Withdrawal Permit #0123 located just 0.75 mile west of "Gaithers Karst Window" collapse.

Discharges of contaminated stormwater into "Gaithers Karst Window" collapse would be in violation of 40 CFR § 144.12.

40 CFR § 144.12 Prohibition of movement of fluid into underground sources of drinking water.

(a) No owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons. The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met.

⁴ Taylor, Charles J. "Delineation of ground-water basins and recharge areas for municipal water-supply springs in a karst aquifer system in the Elizabethtown area, Northern Kentucky." USGS Water-Resources Investigations Report (1997): 22. Available from the US Geological Survey at: <http://pubs.usgs.gov/wri/1996/4254/report.pdf> [accessed 2/10/2015]

(b) For Class I, II, III, and VI wells ...

(c) For Class V wells, if at any time the Director learns that a Class V well may cause a violation of primary drinking water regulations under 40 CFR part 142, he or she shall:

(1) Require the injector to obtain an individual permit;

(2) Order the injector to take such actions (including, where required, closure of the injection well) as may be necessary to prevent the violation. For EPA administered programs, such orders shall be issued in accordance with the appropriate provisions of the SDWA; or

(3) Take enforcement action.

(d) Whenever the Director learns that a Class V well may be otherwise adversely affecting the health of persons, he or she may prescribe such actions as may be necessary to prevent the adverse effect, including any action authorized under paragraph (c) of this section.

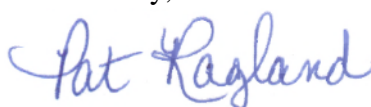
(e) Notwithstanding any other provision of this section, the Director may take emergency action upon receipt of information that a contaminant which is present in or likely to enter a public water system or underground source of drinking water may present an imminent and substantial endangerment to the health of persons. If the Director is an EPA official, he must first determine that the appropriate State and local authorities have not taken appropriate action to protect the health of such persons, before taking emergency action.

This increased groundwater flow will naturally accelerate the processes of karst collapses. The large size of "*Gaithers Karst Window*" collapse proves the presence of large karst voids that are starting to collapse. Ground failure of areas underlain by karst voids threaten any kind of building or infrastructure development. Karst collapses will release various unknown contaminants from any developments and from sewer lines into the public underground source of drinking water.

In addition to the necessity to protect the public drinking water supply, as a local landowner of a farm on W. Arnold Lane it is imperative that the aquifer under my property be protected from contamination.

The U.S. Environmental Protection Agency must prohibit the "*Gaithers Karst Window*" collapse from being used as an "*improved sinkhole*" Class V Underground Injection Control Well. The U.S. Environmental Protection Agency must take action to prevent contaminants from developments around the "*Gaithers Karst Window*" collapse to enter the public underground source of drinking water.

Sincerely,



Pat Ragland
Email: patragland@outlook.com

cc: Gina McCarthy, Administrator, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, (1101A), Washington, D.C. 20460, by Priority Mail Express EK 558347486US

Peter C. Grevatt, Director, Office of Ground Water and Drinking Water, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, (4601M), Washington, DC 20460, by Priority Mail Express EK 558347490US

Larry Gottesman, National Freedom of Information Officer, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, (2822T), Washington, DC 20460, by Priority Mail Express EK 558347509US

Pat Ragland
PO Box 2725
Elizabethtown, KY 42702-2725
Email: patragland@outlook.com

October 21, 2015

Via FOIAonline

Freedom of Information Officer
U.S. Environmental Protection Agency, Region 4

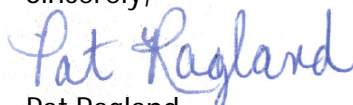
RE: FREEDOM OF INFORMATION ACT REQUEST

Pursuant to the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, and implementing regulations of the U.S. Environmental Protection Agency ("EPA" or "Agency"), 40 C.F.R. Part 2, I request all records regarding the U.S. Environmental Protection Agency's handling of my August 22, 2015 complaint about developments at "Gaithers Karst Window" in Hardin County Kentucky as: RE: COMPLAINT THAT THE PROPOSED ALTERATIONS TO "GAITHERS KARST WINDOW" WILL VIOLATE THE FEDERAL UNDERGROUND INJECTION CONTROL REGULATIONS (attached). Please include all correspondences, emails, faxes, plans, planning determinations, studies, jurisdictional determinations, applications, permits, permit denials, modifications, inspections, complaints, environmental releases, violations, inquiries, administrative orders, groundwater protection provisions, investigations, etc regarding the environment of the collapsed sinkhole known as "Gaithers Karst Window" located in Hardin County Kentucky with coordinates, 37°39'23.35"N, 85°53'26.28"W.

I understand that there may be fees and costs associated with this request, and I agree to pay any fees or costs up to \$500 (five hundred dollars) associated with making these records available to me. If the costs will be in excess of \$500 (five hundred dollars), please advise me before such costs are incurred.

Please email me any questions you may have at patragland@outlook.com.

Sincerely,


Pat Ragland

Final Disposition, Request EPA-R4-2016-000590

woodard.lawana@epa.gov

Tue 11/24/2015 3:10 PM

Inbox

To: patragland@outlook.com <patragland@outlook.com>;

1 attachment (3 KB)

EPA-R4-2016-000590 Invoice 20151124.pdf;

EPA-R4-2016-000590 has been processed with the following final disposition: Full grant.

Records were released to the public as a result of this request. You may retrieve these records immediately using the following link: [View Records](#). Over the next 2 hours, these records are also being added to FOIAonline's search pages, further enabling you to retrieve these documents associated with your FOIA request at any time.

Dear Requester,

In addition to the above system-generated information, we have mailed a response to you through postal mail, which provides detailed information regarding the closure of your request.

If records are provided in response to your request, our goal is to provide those records in a format that offers the most ease of use to you. We release records through a variety of formats such as electronically in FOIAOnline, hardcopy or compact disk (CD). In most instances, the records are available for download in FOIAOnline unless they require release in an alternative format for some other reason (i.e. volume of responsive records or releasable only to the requestor).

The FOIA Specialist who processed your request will advise you regarding any important details regarding your request and is available to answer any questions you may have regarding processing. The FOIA Specialist who processed your request is Ms. Gayla Uslu, 404-562-8676 or uslu.gayla@epa.gov.

Excellence in customer service and transparency is important to us and we strive to process all FOIA requests submitted to EPA Region 4 in a timely, professional and efficient manner. Should you have any concerns or questions regarding the EPA Region 4 FOIA Program, please contact me at 404-562-9642 or gross.louann@epa.gov.

Sincerely,

LouAnn Gross

Chief, Information Access Section



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

NOV 23 2015

Ms. Pat Ragland
P.O. Box 2725
Elizabethtown, Kentucky 42702

RE: Freedom of Information Request No. EPA-R4-2016-000590

Dear Ms. Ragland:

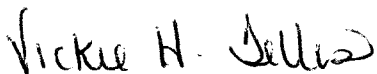
This letter is in response to your Freedom of Information Act (FOIA) request dated October 22, 2015, regarding your complaint about Gaither Karst Window.

Enclosed please find the records responsive to your request. The fees for processing this portion of your request are waived as de minimis.

You may appeal this response to the National Freedom of Information Officer, U.S. EPA, FOIA and Privacy Branch, 1200 Pennsylvania Avenue, N.W. (2822T). Washington, D.C. 20460 (U.S. Postal Service Only), FAX: (202)-566-2147, Email: hq.foia@epa.gov. Only items mailed through the United States Postal Service may be delivered to 1200 Pennsylvania Avenue, N.W. If you are submitting your appeal via hand delivery, courier service or overnight delivery, you must address your correspondence to 1301 Constitution Avenue, N.W., Room 6416J, Washington, D.C. 20004. Your appeal must be made in writing, and it must be submitted no later than 30 calendar days from the date of this letter. The Agency will not consider appeals received after the 30 calendar day limit. The appeal letter should include the FOI number listed above. For quickest possible handling, the appeal letter and its envelope should be marked "Freedom of Information Act Appeal."

Should you have questions regarding this response, please contact Ms. Gayla Mendez, Government Information Specialist, at (404)562-8676.

Sincerely,


for Kenneth R. Lapierre
Assistant Regional Administrator

Enclosures

1. Index
2. Responsive Documents

Index of Non-Exempt Documents
(EPA-R4-2016-000590)

1. Email from Robert Olive, USEPA to Addressees, Re: Controlled Correspondence Due 9/8 Ragland Letter, dated September 8, 2015, 2 pages.
2. Email from Robert Olive, USEPA to Addressees, Ref: Gaither Springs, dated August 25, 2015, 1 page.
3. Handwritten Notes, dated Sept 3, 2015. 1 page.

Olive, Robert

From: Olive, Robert
Sent: Tuesday, September 08, 2015 11:21 AM
To: Jones, Annette; Sewell, Sylvia
Cc: McManus, Fred; Olive, Robert
Subject: Controlled Correspondence Due 9/8 Ragland Letter
Attachments: Ragland Letter - Gaither Spring Sept 2015 .docx

Annette, Sylvia:

I have a controlled correspondence for the RA's signature that is due. I have attached the letter and have the blue folder at my desk. Can you work up the routing package and I will bring the blue folder to whoever is working on the package.

Thanks.

Robert Olive

US EPA, Region 4
Ground Water and UIC Section
61 Forsyth Street
Atlanta, GA 30303-8960

404-562-9423
olive.robert@epa.gov

Ms. Pat Ragland
P.O. Box 2725
Elizabethtown, Kentucky 42702-2725

Dear Ms. Ragland:

Thank you for your August 22, 2015, letter concerning the protection of Gaither Spring near Elizabethtown, Kentucky. You requested information about the U. S. Environmental Protection Agency's Underground Injection Control program.

As you mentioned in your letter, the EPA Region 4 Underground Injection Control program regulates the directed flow of fluids into improved sinkholes. An improved sinkhole meets the definition of an injection well. If stormwater is directed to the sinkhole, then inventory information must be submitted to the EPA. After evaluation of the information, the EPA can rule authorize the injection or require a permit application to be submitted for further evaluation.

At this time, the EPA has not received inventory information for any proposed injection into Gaithers Karst Window, the sinkhole that you reference in your letter. Recent Google Earth images of the completed highway do not appear to show any stormwater being directed to Gaithers Karst Window which is connected hydrogeologically to Gaither Spring. If the Hardin County Cooperative Extension Service has plans to direct stormwater to Gaithers Karst Window from their proposed facility, then inventory information must be submitted to the EPA.

I encourage you to contact Mr. Chris Yeary (502-564-3410) with the Kentucky Source Water Protection Program. He is aware of the Gaither Spring issues and can help address your concerns. Also, contact Mr. Shaun Youravich (270-737-1056), Operations Manager of Hardin County Water District #2. Since the Water District uses water from Gaither Spring as one source of public drinking water, Mr. Youravich shares your interest in protecting the water quality of Gaither Spring.

We appreciate your desire to protect and preserve the environment and hope you find this information helpful. If we may be of further assistance, please contact Robert Olive at 404-562-9423.

Sincerely,

Heather McTeer Toney
Regional Administrator

Olive, Robert

From: Olive, Robert
Sent: Tuesday, August 25, 2015 3:05 PM
To: Marsh, Nancy
Cc: Olive, Robert
Subject: Gaither Spring - UIC - Pat Ragland

Nancy:

I looked over the August 22, 2015 correspondence from Pat Ragland to R4 Regional Administrator Ms. McTeer Toney regarding Gaither Spring near Elizabethtown, KY. This letter is similar to recent correspondence that we have received and responded to from Richard McGehee. It is encouraging that these citizens are concerned about the ground water around Gaither Spring. However, it is my opinion that both citizens overestimate the EPA's authority on these types of land use issues.

Pat Ragland's letter focuses on the on the UIC storm water issues related to the development around Gaither Spring. She correctly points out that if storm water is directed to a sinkhole, then the sinkhole would be considered an Improved Sinkhole Class 5 Injection Well.

At this time, R4 has not received the required Inventory Information if storm water was being directed to a sinkhole (Gaither Karst Window). The Google Map image on Page 2 does not appear to show storm water being directed to the sinkhole. If any future development in this area proposes to direct storm water to an improved sinkhole, then they would also have to submit Inventory Information to the EPA R4 UIC program.

Typically the EPA R4 UIC program would Rule Authorize this type of Improved Sinkhole Class 5 Injection Well. This is fairly common in karst areas of Kentucky. The UIC program does coordinate with local agencies to see that they have addressed water quality issues before injection is authorized.

The local PWS, Hardin County Water District #2, and the KY Rural Water Association are working together to update the District's Source Water Protection Plan. They are also working with the local Planning and Zoning Commission to address future potential impacts to Gaither Spring.

In a limited area near Oak Grove, KY, UIC Class 5 Storm Water Wells have been permitted. This was in a limited area where the drinking water spring was shown to have been severely impacted by storm water flow into area sinkholes.

Robert Olive

US EPA, Region 4
Ground Water and UIC Section
61 Forsyth Street
Atlanta, GA 30303-8960

404-562-9423
olive.robert@epa.gov

9-3-15

Pat Rugland letter

Gaither Spring, KY

Kentucky Heartland Agricultural Complex

Mr. Chris Yeary | KY WHP 502-564-3410

Hardin County WD #2 Mr. Shaun
270-737-1056 Youravich
Operations Manager.

KDOT. N37, 34 39.1

W86 2

10.7

NO